

Conference Paper

Tuberculosis Epidemiology in South Konawe Regency, Southeast Sulawesi, Indonesia

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One of the deadliest infectious diseases in the world is Tuberculosis. The disease is caused by *Mycobacterium tuberculosis* and causes health problems around the world. Tuberculosis has spread globally. This study used various sources of information from Indonesia Government Agencies. Tuberculosis data was obtained from South Konawe Public Health Office in the period from 2018 to 2020. The data is an annual report published by the South Konawe Public Health Office. Cases tend to increase in men other than women. Men are mostly susceptible to pulmonary TB risk factors. The cure rates percentage for TB patients in South Konawe Regency varies every year, such as in the year 2020 it became very low. The high number of TB patients is in Ranomeeto and Benua sub-districts. Cases show that prevention improvement is needed in these sub-districts. The number of TB patients and mortality rate in South Konawe Regency tend to increase every year. Real actions are needed from the government, health workers and the community itself to reduce the number of sufferers and mortality.

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Knowledge E

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Selection and Peer-review under the responsibility of the ICASI Conference Committee.

Keywords: TB, South Konawe Regency, Indonesia

1. INTRODUCTION

Tuberculosis is the lungs contagious infectious disease that brings to the death. This infection is caused by *Mycobacterium tuberculosis* and becomes big health problem in the world [1]. Tuberculosis also spread globally in the world with a high number of morbidity rates [2]. Death rate for tuberculosis has decreased compared to the previous year. The tuberculosis case is still the number one cause of death among other infectious diseases. It is occur in people older than 5 (five) years [3]. Increased morbidity and mortality of tuberculosis requires efforts to prevent by considering main factors which cause rapid transmission of tuberculosis in the community [4][5].

Tuberculosis cases improvement has infected many people around the world.

2019 Global Tuberculosis data was reported that the most tuberculosis cases in 2018 were in Southeast Asia (44%), Africa (24%) and the West Pacific (18%) with a smaller share in the Eastern Mediterranean region (8%), America (3%) and Europe (3%).

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The prevalence of tuberculosis in Indonesia is also very high. Tuberculosis cases in Indonesia are included in the third largest. The tuberculosis cases at 8% of the total cases in the world, after India (27%) and China (9%) [6]. On the year 2016, the Southeast Sulawesi region found that 3,268 new cases of smear positive (BTA+), slightly lower than 2015 with 3,802 cases. In the previous year, the highest number of new cases reported came from 3 districts are Muna, Konawe, and Kendari. The number of new cases in the 3 districts reached 50% of the total new cases of AFB+ in Southeast Sulawesi [7][8].

Poor understanding towards tuberculosis becomes the main factor of the prevention strategy [9]. It leads bad socio-economic conditions of the community where most of the patients having economic difficulties to cure the tuberculosis patients [10]. There are some patients who do not have adequate understanding that tuberculosis can be transmitted. As a result, tuberculosis patients could not get properly treatment on their daily activity [11][12].

2. METHOD

South Konawe Regency is located in the Southeastern Peninsula of Sulawesi Island. It is located in the southern part of the equator. running from North to South between 3°58.56' and 4°31.52' South Latitude and longitude from West to East between 121.58' and 123.16' East Longitude.

This study is using various sources from the Indonesian Government Agencies. Information on TB cases was obtained from the South Konawe District Health Office from 2018 to 2020. It was the annual Health Service Profile published by the South Konawe District Health Office. The results of the study are presented on the images as follow

3. RESULT

Result of the research showed that by gender in the year 2018 to 2020 TB spread out to the men other than women. The cases tend to increase every year (Figure 1)

The Figure 2 showed that the highest *Recovery Percentage of TB patient* was 2019 and the lowest was 2020

Based on sub-district in the year 2018 and 2020, Benua is the highest TB cases. In the 2019 the highest is Ranomeeto sub-district (Figure 3).

According to the Figure 4 the highest death was 2020 and the lowest was 2018.

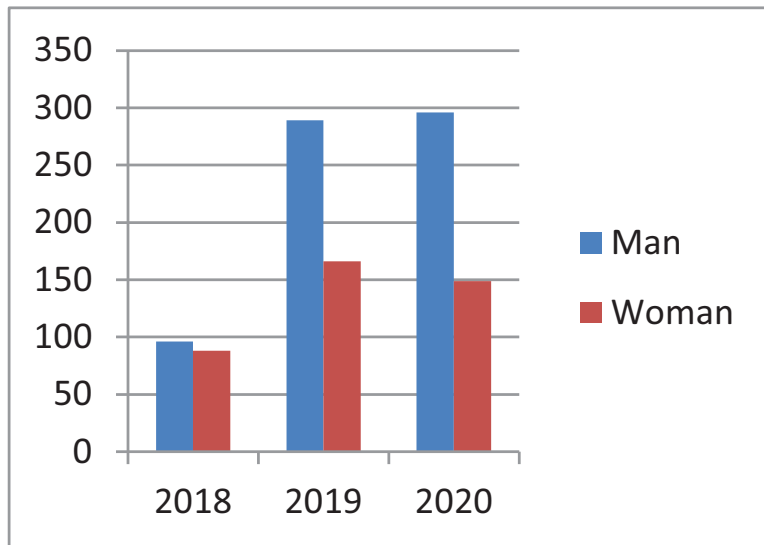


Figure 1: Number of TB cases by Gender in South Konawe Regency.

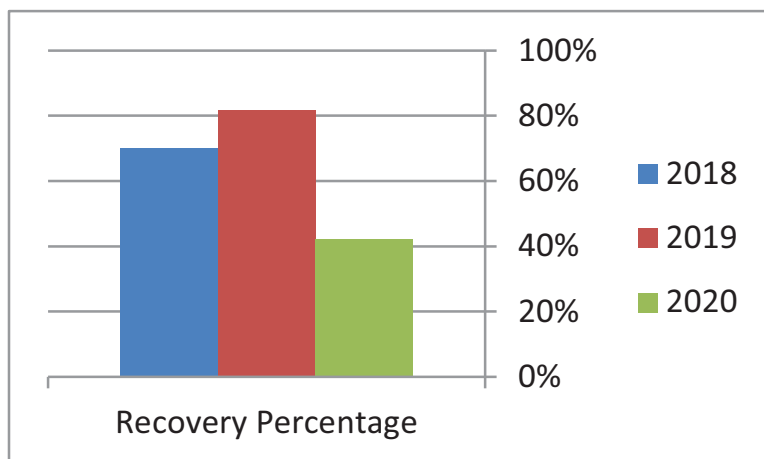


Figure 2: Recovery Percentage of TB patient in South Konawe Regency.

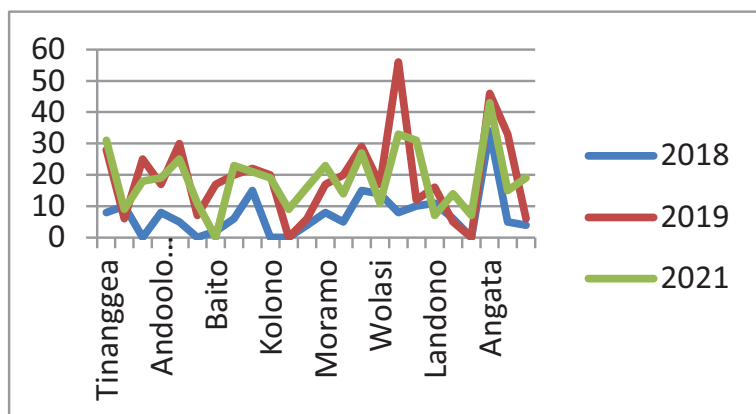


Figure 3: Number of cases based on sub district in South Konawe Regency.

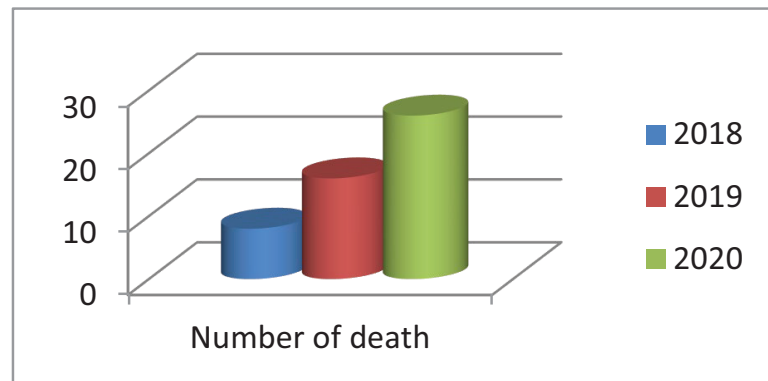


Figure 4: Number of death due to TB cases South Konawe Regency.

4. DISCUSSION

Number of TB patients in South Konawe Regency tends to increase every year. There are more men than women exposed due to the fact that men tend to be more susceptible to pulmonary TB risk factors. Men do more activities so that they are more often exposed to the causes of this disease. The results of the Redvord study stated that by gender cases of AFB + in pulmonary tuberculosis males were higher than females. It was almost 1.5 times compared to females [13].

The cure percentage rate for TB patients in South Konawe Regency are varies every year. The lowest case was in 2020 this could be due to various factors. One of them is the adjustment of health habit due to the covid-19 pandemic [14].

It is need the prevention and improvement strategy in Ranomeeto and Benua sub-districts. TB death rates always increase year by year in South Konawe Regency.

Improvements for prevention and treatment need to be considered. It is starting from providing information about TB as an infectious disease and how to prevent the spread of TB include attitude of officers, drug taking supervisors and family support [12][15][16].

5. CONCLUSION

The number of TB patients and the death rate in South Konawe Regency tends to increase year by year. The real roles and actions are needed from the government, health workers and the community itself to reduce the number of sufferers and mortality. It focuses on sub district which has lot of TB cases such as Ranomeeto and Benua. The recovery rate of patients is varied so that many actions are needed. The patients need to obey regulation so TB outbreak can be solved.

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